

## EAST Search History

| Ref # | Hits | Search Query  | DBs                          | Default Operator | Plurals | Time Stamp       |
|-------|------|---|------------------------------|------------------|---------|------------------|
| S96   | 32   | S95 and ((lines stripes) with degree with angle)  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/14 17:01 |
| S95   | 628  | "349"/\$.ccls. and ((improved superior) with resolution)  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/14 17:01 |
| S94   | 0    | "349"/\$.ccls. and (pixel with (lines stripes) with per with degree)  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2008/01/10 20:04 |
| S93   | 0    | "349"/\$.ccls. and (number with pixel with (lines stripes) with per with degree)  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2008/01/10 20:04 |
| S92   | 1    | "349"/\$.ccls. and (number with pixel with (lines stripes) with per with degree)  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/10 20:04 |
| S91   | 2    | ("5655965" "6004208").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/10 20:03 |
| S90   | 1    | ("6655965").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2008/01/10 19:59 |
| S89   | 4    | S88 and pixel   | US-PGPUB;<br>USPAT           | OR               | ON      | 2008/01/10 19:58 |
| S88   | 36   | ((NOBUYUKI) near2 (NONAKA)).INV.  | US-PGPUB;<br>USPAT           | OR               | ON      | 2008/01/10 19:55 |
| S87   | 4    | "349"/\$.ccls. and (number near stripes) same degree  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/10 19:48 |
| S86   | 81   | "349"/\$.ccls. and (number near stripes)  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/10 19:48 |
| S85   | 11   | ("20020015110" "20020080295" "20030016318" "20030025662" "20030060271" "5144288" "5168270" "5250937" "5617230" "5936694" "6407793").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2008/01/10 19:48 |
| S84   | 0    | ("20020015110" "20020080295" "20030016318" "20030025662" "20030060271" "5144288" "5168270" "5250937" "5617230" "5936694" "6407793").PN. | JPO                          | OR               | ON      | 2008/01/10 19:41 |
| S83   | 10   | (pixel adj (line or stripe)) and degree   | JPO                          | OR               | ON      | 2008/01/10 19:41 |
| S82   | 0    | (pixel adj (line or stripe)) and angle and degree   | JPO                          | OR               | ON      | 2008/01/10 19:39 |

## EAST Search History

|     |      |   |                              |    |     |                  |
|-----|------|---|------------------------------|----|-----|------------------|
| S81 | 0    | (pixel adj (line\$1 or stripe\$1)) and angle and degree             | JPO                          | OR | ON  | 2008/01/10 19:38 |
| S80 | 471  | (pixel adj lines)   | JPO                          | OR | ON  | 2008/01/10 19:38 |
| S79 | 0    | line/deg  | JPO                          | OR | ON  | 2008/01/10 19:38 |
| S78 | 0    | ("6407793").URPN.   | USPAT                        | OR | ON  | 2008/01/10 19:38 |
| S77 | 78   | (pixel adj (line stripe)) same degree same angle                    | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 19:24 |
| S76 | 67   | (pixel same degree same angle same (line stripe) same "35")         | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 19:23 |
| S75 | 1983 | (pixel same degree same angle same (line stripe))                   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 19:21 |
| S74 | 5    | ("5396694" "5982470" "6172732" "6333771" "6407793").PN.             | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 19:20 |
| S73 | 7    | "349"/\$.ccls. and ((lines stripes) with per with degree)           | USPAT;<br>USOCR              | OR | ON  | 2008/01/10 18:53 |
| S72 | 0    | "349"/\$.ccls. and (lines/deg)                                      | USPAT;<br>USOCR              | OR | ON  | 2008/01/10 18:53 |
| S71 | 5    | "349"/\$.ccls. and ("pixel line" with degree)                       | USPAT;<br>USOCR              | OR | ON  | 2008/01/10 18:52 |
| S70 | 3    | "349"/\$.ccls. and ("pixel line" with angle)                        | USPAT;<br>USOCR              | OR | ON  | 2008/01/10 18:49 |
| S69 | 183  | "349"/\$.ccls. and ("pixel line")                                   | USPAT;<br>USOCR              | OR | ON  | 2008/01/10 18:49 |
| S68 | 0    | (10/697947).APP.  | USPAT;<br>USOCR              | OR | ON  | 2008/01/10 18:49 |
| S67 | 3    | ("5936694"   "5982470"   "6172732").PN. OR ("6407793").URPN.        | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 13:59 |
| S66 | 29   | "349"/\$.ccls. and ((pixel\$1 near3 line\$1 near3 degree))          | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 13:31 |
| S65 | 15   | "349"/\$.ccls. and ((pixel\$1 with line\$1 with degree) same pitch) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 13:30 |
| S64 | 344  | "349"/\$.ccls. and (pixel\$1 with line\$1 with degree)              | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2008/01/10 13:29 |
| S63 | 1    | ("20040192441").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/01/10 13:29 |

## EAST Search History

|     |      |   |   |    |     |                  |
|-----|------|---|---|----|-----|------------------|
| S62 | 1    | ("20030016318").PN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2008/01/10 13:26 |
| S61 | 1    | ("20040192441").PN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2007/10/03 17:45 |
| S60 | 2    | ("5144288" "5168270").PN.                                   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | ON  | 2007/10/03 17:44 |
| S59 | 1    | ("5415549").PN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 20:37 |
| S58 | 1    | ("7094147").PN.   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 20:37 |
| S57 | 4    | (milap).xa.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO | OR | OFF | 2006/08/29 13:43 |
| S56 | 0    | (MILAP).XA.   | EPO; JPO                                  | OR | OFF | 2006/08/29 13:43 |
| S55 | 13   | nonaka.in. and pitch and distance                           | EPO; JPO                                  | OR | OFF | 2006/08/29 13:29 |
| S54 | 94   | nonaka.in. and pitch  | EPO; JPO                                  | OR | OFF | 2006/08/29 13:20 |
| S53 | 72   | nonaka.in. and pixel  | EPO; JPO                                  | OR | OFF | 2006/08/29 13:20 |
| S52 | 8481 | nonaka.in.  | EPO; JPO                                  | OR | OFF | 2006/08/29 13:20 |
| S51 | 8    | (pitch) with formula with pixel\$1                          | EPO; JPO                                  | OR | OFF | 2006/08/29 13:20 |
| S50 | 4    | (dot adj pitch) with formula                                | EPO; JPO                                  | OR | OFF | 2006/08/29 13:19 |
| S49 | 417  | (dot adj pitch)   | EPO; JPO                                  | OR | OFF | 2006/08/29 13:18 |
| S48 | 1722 | (dot adj pitch)   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 13:18 |
| S47 | 15   | ((dot adj pitch) with formula)                              | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 13:18 |
| S46 | 4    | ((dot adj pitch) with tan)                                  | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 13:16 |
| S45 | 41   | (pitch near3 formula) and (monitor LCD crystal display).ti. | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 13:14 |
| S43 | 4    | (pitch near formula) and (monitor LCD crystal display).ti.  | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 13:11 |
| S44 | 2    | S43 not S42   | US-PGPUB;<br>USPAT;<br>USOCR              | OR | OFF | 2006/08/29 13:10 |

## EAST Search History

|     |     |   |                              |    |     |                  |
|-----|-----|---|------------------------------|----|-----|------------------|
| S42 | 3   | "349"/\$.ccls. and (pitch near formula)                           | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:10 |
| S41 | 12  | S33 and pitch   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:09 |
| S40 | 4   | ("20020015110" "20020080295" "20030016318" "20030060271").PN.     | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:06 |
| S33 | 115 | liang.in. and "349"/\$.ccls.                                      | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:06 |
| S38 | 3   | S37 and "463"/\$.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:05 |
| S39 | 86  | S37 and (monitor display crystal).ti.                             | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:00 |
| S37 | 245 | (pitch\$1 with between with pixel\$1) same (formula relationship) | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:00 |
| S36 | 1   | ("20040192441").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 13:00 |
| S35 | 3   | ("5936694"   "5982470"   "6172732").PN. OR ("6407793").URPN.      | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:59 |
| S34 | 1   | ("6407793").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:56 |
| S32 | 7   | (pitch with tangent) same pixel\$1                                | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:56 |
| S31 | 5   | S30 and (line\$1 with degree\$1)                                  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:54 |
| S30 | 128 | "349"/\$.ccls. and (pitch with formula)                           | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:53 |
| S29 | 1   | S25 and ((line\$1 with degree\$1) same pitch)                     | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:53 |
| S26 | 1   | S25 and (pitch with formula)                                      | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:53 |

## EAST Search History

|     |      |   |                              |    |     |                  |
|-----|------|---|------------------------------|----|-----|------------------|
| S28 | 108  | S25 and (line\$1 with degree\$1)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:52 |
| S27 | 0    | S26 and (line\$1 with degree\$1)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:52 |
| S25 | 1074 | 349/139.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:52 |
| S24 | 1    | S23 and (pitch with formula)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:39 |
| S23 | 1074 | 349/139.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:38 |
| S21 | 129  | (pitch with formula) and (monitor display).ti.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/29 12:38 |
| S22 | 4    | (pitch with formula with tan) and (monitor display).ti.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/28 18:27 |
| S14 | 456  | (pitch with (formula relationship)) and (monitor display).ti.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/28 18:26 |
| S20 | 1    | S17 and "463"/\$.ccls.  | USPAT                        | OR | OFF | 2006/08/28 18:18 |
| S19 | 0    | (juxtapos\$3 with pixel\$3) same (pitch with formula)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/28 18:18 |
| S18 | 0    | (juxtapos\$3 with pixel\$3) same (pitch with formula)   | USPAT                        | OR | OFF | 2006/08/28 18:18 |
| S17 | 331  | (juxtapos\$3 with pixel\$3)   | USPAT                        | OR | OFF | 2006/08/28 18:18 |
| S16 | 0    | ("2004/0192441").URPN.  | USPAT                        | OR | OFF | 2006/08/28 18:17 |
| S15 | 1    | ("20040192441").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/28 18:16 |
| S13 | 12   | (pitch with (formula relationship)) and "463"/\$.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/28 18:16 |
| S1  | 2    | ((("20030016318") or ("20020015110")).PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/08/28 18:14 |
| S12 | 11   | ("6015346" "6089976" "6261178" "6309300" "6319124" "6346043" "6347996" "6364767" "6413161" "6558254" "6604740").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/05/17 19:17 |

## EAST Search History

|     |   |  |                              |    |     |                  |
|-----|---|--|------------------------------|----|-----|------------------|
| S11 | 0 | ("6015346" "6089976" "6261178" "6309300" "6319124" "6346043" "6347996" "6364767" "6413161" "6558254" "6604740").PN.).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/05/17 19:17 |
| S10 | 3 | S2 and gam\$3  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/05/17 18:52 |
| S2  | 6 | ((("20030016318") or ("20020015110") or ("20030025662") or ("20020080295") or ("5250937") or ("20030060271")).PN.        | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/05/17 18:52 |
| S9  | 0 | ("6407793").URPN.  | USPAT                        | OR | ON  | 2006/05/17 18:47 |
| S8  | 7 | ("5142392"   "5191452"   "5299041"   "5539546"   "5617230").PN. OR ("5936694").URPN.                                     | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/05/17 18:47 |
| S7  | 3 | ("5936694"   "5982470"   "6172732").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/05/17 18:47 |
| S6  | 5 | ("5396694" "5982470" "6172732" "6333771" "6407793").PN.  | USPAT                        | OR | ON  | 2006/05/17 18:46 |
| S5  | 1 | "6407793"  | USPAT                        | OR | ON  | 2006/05/17 18:46 |
| S4  | 0 | ("2003/0016318").URPN.   | USPAT                        | OR | ON  | 2006/05/17 18:45 |
| S3  | 1 | ("20040192441").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/05/17 18:18 |